

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
14 July 2005 (14.07.2005)

PCT

(10) International Publication Number
WO 2005/064111 A1

(51) International Patent Classification⁷: **E21B 21/08**,
44/00

(21) International Application Number:
PCT/SE2004/001758

(22) International Filing Date:
29 November 2004 (29.11.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0303548-2 29 December 2003 (29.12.2003) SE

(71) Applicant (for all designated States except US): **ATLAS
COPCO ROCK DRILLS AB** [SE/SE]; S-701 91 Örebro
(SE).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **HARTWIG**,

Sverker [SE/SE]; Gripsvällsvägen 7, S-187 33 Täby (SE).
HENRYSSON, Jonas [SE/SE]; Västänbäck, Bäckaskog,
S-716 92 Fjugesta (SE).

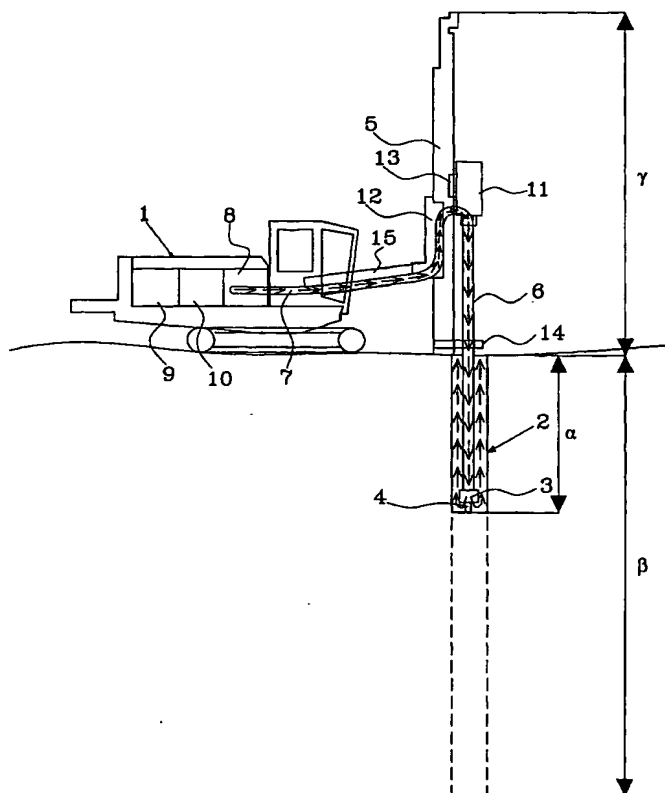
(74) Agent: **EHRNER & DELMAR PATENTBYRÅ AB**;
P.O. Box 10316, S-100 55 Stockholm (SE).

(81) Designated States (unless otherwise indicated, for every
kind of national protection available): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(84) Designated States (unless otherwise indicated, for every
kind of regional protection available): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,

[Continued on next page]

(54) Title: METHOD AND SYSTEM FOR CONTROLLING POWER CONSUMPTION DURING A ROCK DRILLING
PROCESS AND A ROCK DRILLING APPARATUS THEREFOR



(57) Abstract: Method for controlling power consumption during a rock drilling process with a rock drilling apparatus, wherein the rock drilling apparatus includes main power supply means for supplying power for the rock drilling process, which includes at least the sub-processes of percussion and/or rotation and flushing, the method comprising the steps of: - adjusting the flush power at least partly as a function of hole depth, and controlling at least the percussion power and/or rotational power and the flush power such that the total power consumption of each sub-process is controlled.

WO 2005/064111 A1



ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE,
SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

Published:

— *with international search report*